

Please amend the application as follows:

Amendments to the Claims:

This claim listing will replace all prior versions and listings of claims in the application:

Claim Listing:

Claims 1-5 (Canceled)

- Claim 6 (Currently Amended): A method for producing soluble and active recombinant protein comprising:
1. a) expressing an insoluble protein as a fusion protein with an alpha-crystallin type protein ~~or a fragment thereof comprising an active domain~~ in bacteria;
 2. b) purifying said fusion protein; and
 3. c) removing said alpha-crystallin type protein ~~or fragment thereof~~ from said purified fusion protein,
- thereby resulting in said soluble and active recombinant protein.
- Claim 7 (Currently Amended): The method of Claim 6, wherein said alpha-crystallin type protein is selected from the group consisting of p26, SicA, ~~and~~ alpha-A-crystallin, and an expressed p26 active domain comprising active anti-parallel beta sheets of p26 and an active charged core domain of p26.
- Claim 8 (Currently Amended): The method of Claim 6, wherein said fusion protein comprises said alpha-crystallin type protein ~~or a fragment thereof comprising an active domain~~, said insoluble protein, and a proteolytic cleavage site, said cleavage site positioned between said alpha-crystallin type protein ~~or a fragment thereof comprising an active domain~~ and said insoluble protein.
- Claim 9 (Currently Amended): A method of increasing the solubility of a first protein, said method comprising expressing said first protein as fusion protein with a second

protein consisting essentially of an alpha-crystallin type protein ~~or a fragment thereof comprising an active domain~~.

- Claim 10 (Currently Amended): The method of Claim 9, wherein said alpha-crystallin type protein is selected from the group consisting of p26, SicA, ~~and~~ alpha-A-crystallin, and an expressed p26 active domain comprising active anti-parallel beta sheets of p26 and an active charged core domain of p26.
- Claim 11 (Currently Amended): The method of Claim 9, wherein said fusion protein comprises said alpha-crystallin type protein, ~~or a fragment thereof comprising an active domain~~, said first protein, and a proteolytic cleavage site, said cleavage site positioned between said alpha-crystallin type protein ~~or a fragment thereof comprising an active domain~~ and said first protein.
- Claim 12 (Currently Amended): A method of increasing the stability of a first protein, said method comprising:
- ~~1:~~ a) expressing said first protein as a fusion protein with a second protein consisting essentially of an alpha-[[A-]] crystallin type protein in bacteria;
 - ~~2:~~ b) purifying said fusion protein; and
 - ~~3:~~ c) removing said alpha-crystallin type protein ~~or fragment thereof~~ from said purified fusion protein,
- thereby resulting in said first protein.
- Claim 13 (Currently Amended): The method of Claim 12, wherein said alpha-crystallin type protein is alpha-A-crystallin, and wherein said fusion protein comprises said alpha-A-crystallin protein, said first protein, and a proteolytic cleavage site, said cleavage site positioned between said alpha-A-crystallin protein and said first protein.

- Claim 14 (Currently Amended): A method for purifying native bovine alpha-crystallin protein, said method comprising the steps of:
1. ~~a)~~ contacting a protein fraction comprising ~~an~~ the bovine alpha-crystallin protein with a glycine solution having a pH of approximately 2.5;
 2. ~~b)~~ size filtering the fraction of step a) by chromatography;
 3. ~~c)~~ neutralizing the fraction containing the bovine alpha-crystallin protein; and
 4. ~~d)~~ buffering the alpha-crystallin protein to dialyzing the fraction containing the bovine alpha-crystallin protein into a buffer comprising 50% glycerol and having a pH of approximately 8.
- Claim 15 (Currently Amended): A method for protecting a protein from proteolysis during purification, said method comprising applying a sample comprising said protein to a chromatographic pre-column filter, said filter comprising bovine alpha-crystallin protein[[,]] that is coupled to a chromatography resin.